



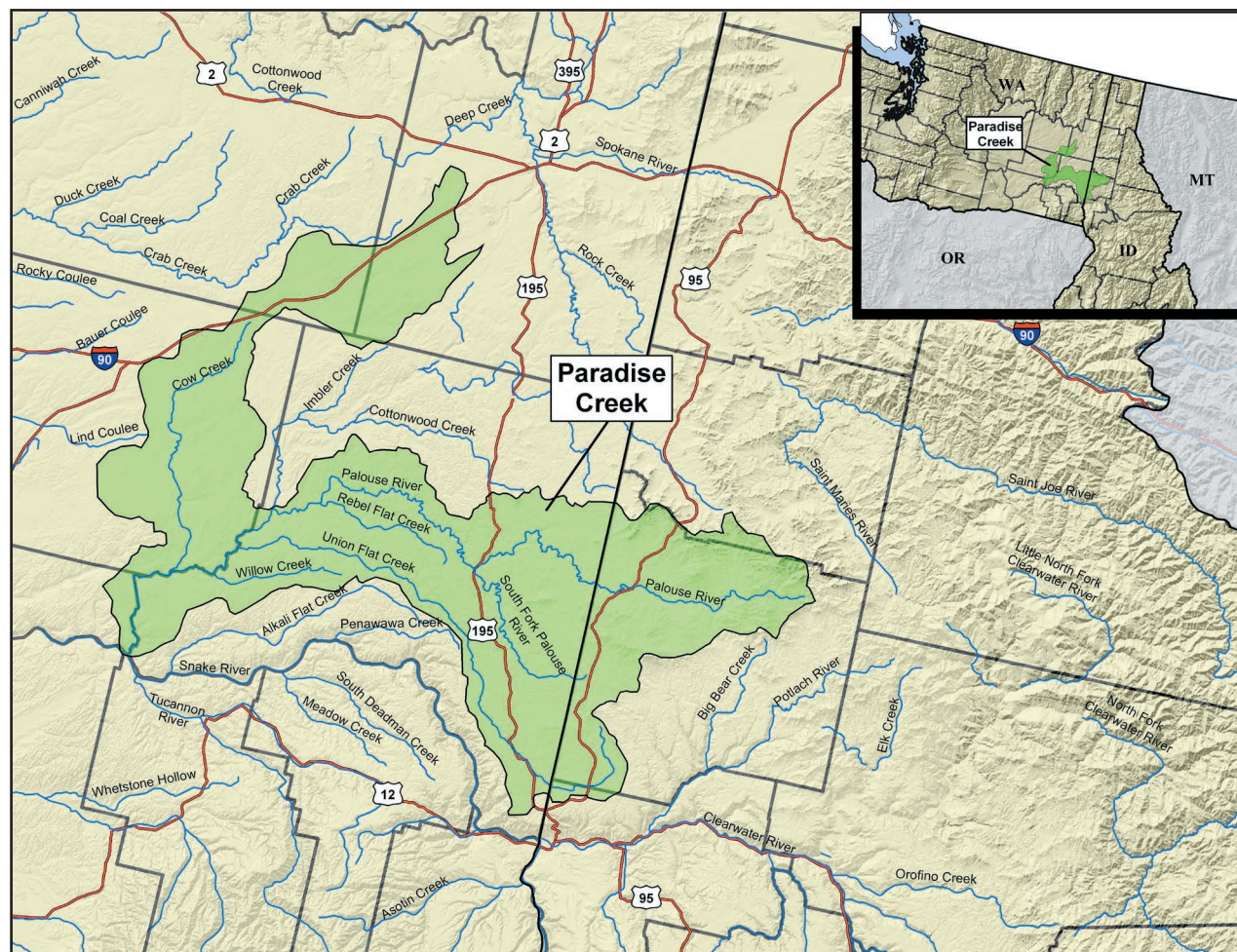
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Watershed Fact Sheet

Paradise Creek Watershed, Idaho: 2004-2007

A CSREES* Competitive Grant Watershed, one of 24 CEAP watershed projects.



CEAP Assessment

Apply statistical methods and geospatial modeling to investigate the effectiveness of multiple conservation practices and determine optimal scenarios for watershed restoration based on physical and socio-economic characteristics.

- A TMDL had been established for ammonia, total phosphorus, sediment, pathogens, and temperature.
- Watershed is a Clean Water Act Section 319 grant demonstration project.

Watershed Description

- 12,000 acres
- 69.5% cropland, 16% forest, 14.5% urban
- Paradise Creek is an impaired waterbody under the Clean Water Act with an approved Total Maximum Daily Load (TMDL).

Issues: Soil erosion, sediment transport

* Cooperative State Research, Education, and Extension Service



Researchers in the Paradise Creek watershed are trying to clean up the water in the creek by planting forest buffers (background) and a no-till grass buffer strip (lower left) to provide filters for run-off water from the mountains in the background.



A forested buffer strip of small pine trees has been planted in the Paradise Creek watershed to filter run-off water protecting the pond below.

Approach

Water Sampling: Flow, turbidity, temperature and electrical conductivity (EC), event-based total suspended solids (TSS) sampling, pre-and post-best management practice (BMP) monitoring, water quality monitoring, U.S. Geological Survey daily flows

Watershed Models: SMR (Soil Moisture Routing), WEPP (Water Erosion Prediction Project), CCHE1D (AGNPS channel network modeling component)

Assess Practices: Direct seed rotation, water and control structures, buffer strips, stream restoration

Communicating Results

Three annual reports, scientific meetings, publications.

Collaborators

- USDA Forest Service, Rocky Mountain Research Station
- USDA Natural Resources Conservation Service
- Latah County Soil and Water Conservation District
- University of Idaho
- Palouse Clearwater Environmental Institute
- Soil Conservation Commission
- Local farmers and operators

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